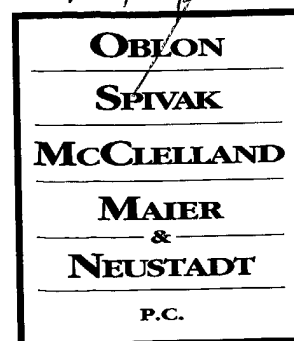




ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

Docket: 0107-0997-3

Re: Group Art Unit: 2834
Serial No.: 09/220,055
CPA Filed: AUGUST 14, 2000
Applicant: REINHARD JOHO, ET AL.
For: LAMINATED STATOR BODY FOR AN
ELECTRICAL MACHINE



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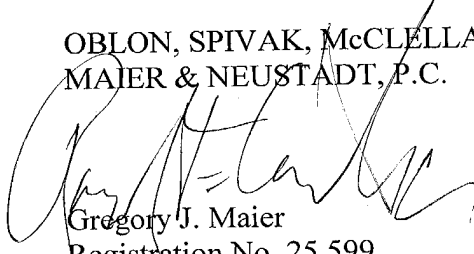
Attached hereto for filing are the following papers:

APPEAL BRIEF WITH APPENDIX (in triplicate)

Our check in the amount of \$ 320.00 is attached covering any required fees. In the event any variance exists between the amount enclosed and the Patent Office charges for filing the above-noted documents, including any fees required under 37 C.F.R. 1.136 for any necessary Extension of Time to make the filing of the attached documents timely, please charge or credit the difference to our Deposit Account No. 15-0030. Further, if these papers are not considered timely filed, then a petition is hereby made under 37 C.F.R. 1.136 for the necessary extension of time. A duplicate of this sheet is enclosed.

Respectfully submitted,

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0107-0997-3

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

#25/appeal
Brief
Hawkins
2/13/02



IN RE APPLICATION OF:

EINHARD JOHO ET AL.

: GROUP ART UNIT: 2834

SERIAL NO: 09/220,055

CPA FILED: AUGUST 14, 2000

: EXAMINER: PEREZ, G.

FOR: LAMINATED STATOR BODY
FOR AN ELECTRICAL MACHINE

APPEAL BRIEF

ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

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SIR:

This is an appeal of the Final Rejected dated June 6, 2001, of Claims 1-15, hereinafter referred to as the FR. A Notice of Appeal was timely filed on December 6, 2001 with an appropriate extension of time.

I. REAL PARTY IN INTEREST

The real party in interest in this appeal is ASEA BROWN BOVERRI AG. having a place of business at CH-5401 Baden, Switzerland.

II. RELATED APPEALS AND INTERFERENCES

Appellants, Appellants' legal representative, and the assignees are aware of no appeals which will directly affect or be directed affected by or have a bearing on the Board's decision in this appeal.

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III. STATUS OF CLAIMS

Claim 1-15 stand finally rejected, which final rejection forms the basis for this appeal.

IV. STATUS OF THE AMENDMENTS

No amendments have been filed after the final rejection of June 6, 2001. A Request for Reconsideration was filed on October 6, 2001, hereinafter referred to as the "Request," but this Request was not considered to overcome the rejections applied to Claims 1-15 as indicated by the Advisory Action mailed on November 8, 2001. The attached Appendix reflects the claims as last amended on March 26, 2001

V. SUMMARY OF THE INVENTION

The present invention is directed to a laminated stator body for an electrical machine which is made up of a multiplicity of lamination segments (1) that are arranged next to each other in both a circumferential direction and in an axial stacking direction to form a laminated stator body as explained at page 3, lines 24-27 of the specification, for example. Each of these lamination segments (1) are provided with slots (2) for stator windings on a radial inside thereof, with these slots all arranged in alignment when the stator body is formed as explained at page 3, lines 27-28 of the specification, for example. Each slot (2) extends from the radial inside to a root portion nearest to a radial outside of each segmental lamination (N_T), with the portion of each segmental lamination remaining between the root portion and the radial outside defining a yoke height (J_H) as shown in FIG. 1, for example. Each of the lamination segments (1) is further provided on its radial outside with periodically distributed notches which extend inwardly toward the radial inside a distance

illustrated as K_T in FIG. 1, for example. These notches are filled only by the surrounding atmosphere that exists around the stator body and are also all of equal dimensions including the notch depth (K_T) that is much less than yoke height (J_H) as shown in FIG. 1, for example. The number and depth of the notches is selected to increase mechanical strength by reducing vibration amplitudes during operation by reducing the resonate frequency below the rotational excitation frequency. See page 2, lines 30-38 and page 4, lines 20-36 of the specification, for example.

VI. ISSUES

The issues in this aspect is whether or not the subject matter of Claims 1 and 15 would have been obvious under 35 U.S.C. §103(a) over Yoshihiko (JP 01-126141) in view of Mulach et al (U.S. Patent No. 4,494,030, Mulach), whether or not the subject matter of Claims 2, 7, and 9 would have been obvious under 35 U.S.C. §103(a) over Yoshihiko in view of Mulach and further in view of Hershberger (U.S. Patent No. 3,421,034), whether or not the subject matter of Claims 3-6 would have been obvious under 35 U.S.C. §103(a) over Yoshihiko in view of Mulach and further in view of Sacher (DE 195 10 729 A1), whether or not the subject matter of Claims 8 and 10-14 would have been obvious under 35 U.S.C. §103(a) over Yoshihiko in view of Mulach and further in view of Hershberger and Sacher.

VII. GROUPING OF THE CLAIMS

Claims will stand or fall separately and is argued separately below. Claim 15 will stand or fall with Claim 1. Claims 2, 7, and 9 will stand or fall separately and are argued separately below. Claims 3-6 will stand or fall together and are argued together below.

Claims 8 and 14 will stand or fall together and are argued together below. Claims 10-13 will stand or fall together and are argued together below

VIII. ARGUMENT

A. YOSHIHIKO TEACHINGS HAVE BEEN IMPROPERLY EXPANDED

The top of page 3 of the FR admits that Yoshihiko lacks any teaching or suggestion of having a notch depth that is much less than the yoke height, but page 2 improperly assumes or speculates that Yoshihiko teaches “the number and depth of the notches (12) being selected to increase mechanical strength by reducing vibration amplitudes during machine operation,” a limitation of Claim 1. As noted in the Request, In re Rijckaert, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) establishes that when the PTO asserts that there is an explicit or implicit teaching or suggestion in the prior art, it must indicate where such a teaching or suggestion appears in the reference and that it is improper for the PTO to attempt to read non-existent teachings into a reference. Instead of the Advisory Action pointing to where such a teaching or suggestion of “the number and depth of the notches (12) being selected to increase mechanical strength by reducing vibration amplitudes during machine operation” appears in Yoshihiko, In re Rijckaert is ignored and the corresponding tacit admission of making an improper speculative assumption based upon an improper hindsight reconstruction has been established.

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intended
purpose?
means +
function?

As further noted in the Request, In re Warner, 154 USPQ 173, 178 (CCPA 1967) establishes that deficiencies in the factual basis for any rejection cannot be made up by speculative assumptions based only on hindsight reconstruction as follows:

A rejection based on section 103 clearly must rest on a factual basis, and these facts must be interpreted without hindsight reconstruction of the

invention from the prior art. In making this evaluation, all facts must be considered. The Patent Office has the initial duty of supplying the factual basis for its rejection. It may not, because it may doubt that the invention is patentable, resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in its factual basis. [Emphasis added.]

The need for a proper factual basis for any rejection has been further emphasized by In re Sporek, 133 USPQ 360, 364 (CCPA 1962) ("We are unwilling to substitute speculation and hindsight appraisal of the prior art for such factual data.") and more recently by In re Zurko, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001) as follows:

With respect to core factual findings in a determination of patentability, however, the Board cannot simply reach conclusions based on its own understanding or experience — or on its assessment of what would be basic knowledge or common sense. Rather, the Board must point to some concrete evidence in the record in support of these findings. [Emphasis added, footnote omitted.]

Just as the Board must be able to "point to some concrete evidence in the record" so must the examiner.

Besides the fact that Yoshihiko has been admitted to lack any teaching or suggestion of selecting the number and depth of the notches 12 "to increase mechanical strength by reducing vibration amplitudes during machine operation," there is further error in the FR in terms of ignoring that "segmental" and "laminations" are two different words which must each be separately considered under the well established rule of In re Wilson, 165 USPQ 494, 496 (CCPA 1970) ("all words in a claim must be considered in judging the patentability of that claim against the prior art"). Instead of considering "segmental" and giving this word any kind of reasonable interpretation as to its ordinary meaning of being one of many segments, which ordinary meaning clearly corresponds to the disclosure of segmental arcuate laminations such as shown in FIG. 1 as encompassing only a segmental portion of a full circle, the FR simply assumes the Yoshihiko lamination 14 is "segmental" in nature.

However, while Yoshihiko illustrates only part of each circular lamination 14 as an

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enlargement in Figures 1 and 2, it is believed to be clear that the use of standard irregular side lines as to these illustrated enlargements indicates that these Figures are simply enlarged showings of a portion of each lamination 14 that is actually formed as full circular laminations as shown by Figure 3.

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2. PROPER MOTIVATION TO COMBINE REFERENCE TEACHINGS IS LACKING.

Besides Yoshihiko lacking any teaching or suggestion of selecting the number and depth of the notches 12 "to increase mechanical strength by reducing vibration amplitudes during machine operation," and any teaching or suggestion as to having "segmental laminations" or any reason for having a notch depth that is much less than the yoke height which is admitted to be lacking at the top of page 3 of the FR, Mulach lacks any teachings or suggestions that are logically relevant to modifying the depth of the notches 12 illustrated in Figure 2 of Yoshihiko.

Mulach teaches that reference numeral 44 annotates elements that are "typical partially circular holes 44 in which the building bolts will be disposed along with the circular holes 46 through which the through bolts will pass." There is no similarity in purpose or design of these "typical partially circular holes 44 in which the building bolts will be disposed" and the notches 12 of Yoshihiko, because these notches 12 are not holes in which any "building bolts" or any conductor will be disposed. Instead, and as noted at the bottom of page 2 of the FR, the relied upon FIG. 2 showing of Yoshihiko includes notches 12 "filled only with an atmosphere surrounding said laminated stator body," not with a bolt or insulating cylinder around a bolt. The purpose and intended operation of the lamination 14 notches 12 of Yoshihiko would be destroyed if they were provided as the partially circular bolt holes 44 with the conductive "building bolts" surrounded by the insulating cylinder

teaching
away

taught by Mulach.

It is well established that any proposed modification requiring a change in the basic operating principle under which a reference performs is not an obvious modification. See In re Ratti, 123 USPQ 349, 352 (CCPA 1959). Also, it is well established that any reference modification which would render the reference being modified unsatisfactory for its intended purpose is not an obvious modification. See In re Gordon, 221 USPQ 1125, 1127 (Fed. Cir. 1984). Accordingly, as the proposed modification to the notches 12 of Yoshihiko would change the basic operating principle intended to be performed thereby and would render these notches 12 unsatisfactory for their intended purpose, a proper reason for the proposed modification has not been set forth and no *prima facie* case of obviousness has been established.

Moreover, and as noted above, to the extent that Mulach teaches any insulating layer relative to the partially circular holes 44, this layer is formed as an "insulative cylinder" 30 that is around bolt 10 as shown in FIG. 4 and discussed at col. 5, lines 4-13. The logical reason why the artisan would use this teaching to replace the atmosphere filled slots 12 of Yoshihiko has not been set forth. This is contrary to established case law requiring the demonstration of a prior art incentive to modify the reference that must be logical and apparent from positive, concrete evidence of record. Note In re Regel, 188 USPQ 136, 139, n.5 (CCPA 1975). The critical need to properly establish evidence of reasonable motivation has been recently emphasized by In re Dembiczak, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999) as follows:

Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references. See, e.g., *C.R. Bard, Inc. v. M3 Sys., Inc.*, 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed. Cir. 1998) (describing "teaching or suggestion or motivation [to combine]" as an "essential

evidentiary component of an obviousness holding"); *In re Rouffet*, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998) ("the Board must identify specifically . . . the reasons one of ordinary skill in the art would have been motivated to select the references and combine them"); *In re Fritch*, 972 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992) (examiner can satisfy burden of obviousness in light of combination "only by showing some objective teaching [leading to the combination]"); *In re Fine*, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988) (evidence of teaching or suggestion "essential" to avoid hindsight); *Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 281, 297, 227 USPQ 657, 667 (Fed. Cir. 1985) (district court's conclusion of obviousness was error when it "did not elucidate any factual teachings, suggestions or incentives from this prior art that showed the propriety of combination"). See also *Graham [v. John Deere Co.]*, 383 U.S. 1, 148 USPQ 459 (1966), 383 U.S. at 18, 148 USPQ at 467 ("strict observance" of factual predicates to obviousness conclusion required). Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability--the essence of hindsight. See, e.g., *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1138, 227 USPQ 543, 547 (Fed. Cir. 1985) ("The invention must be viewed not with the blueprint drawn by the inventor, but in the state of the art that existed at the time."). In this case, the Board fell into the hindsight trap.

We have noted that evidence of a suggestion, teaching, or motivation to combine may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, from the nature of the problem to be solved, see *Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc.*, 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1630 (Fed. Cir. 1996), *Para-Ordinance Mfg. v. SGS Imports Intern., Inc.*, 73 F.3d 1085, 1088, 37 USPQ2d 1237, 1240 (Fed. Cir. 1995), although "the suggestion more often comes from the teachings of the pertinent references," *Rouffet*, 149 F.3d at 1355, 47 USPQ2d at 1456. The range of sources available, however, does not diminish the requirement for actual evidence. That is, the showing must be clear and particular. See, e.g., *C.R. Bard*, 157 F.3d at 1352, 48 USPQ2d at 1232. Broad conclusory statements regarding the teaching of multiple references, standing alone, are not "evidence." E.g., *McElmurry v. Arkansas Power & Light Co.*, 995 F.2d 1576, 1578, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993) ("Mere denials and conclusory statements, however, are not sufficient to establish a genuine issue of material fact."); *In re Sichert*, 566 F.2d 1154, 1164, 196 USPQ 209, 217 (CCPA 1977) ("The examiner's conclusory statement that the specification does not teach the best mode of using the invention is unaccompanied by evidence or reasoning and is entirely inadequate to support the rejection."). [Emphasis added].

Furthermore, it is well established that simply because the elements that are combined together into a claimed combination can be shown to exist in one or another prior

art disclosure, this alone cannot serve as a substitute for considering what such prior art disclosures taken in the context of the entire reference disclosure actually teach and the need to set forth convincing and logical reasoning why the artisan, with no knowledge of the claimed invention, would have selected the claimed elements for combination in the manner specified by the claims. See In re Kotzab, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) noting that:

While the test for establishing an implicit teaching, motivation, or suggestion is what the combination of these [prior art reference teachings] would have suggested to those of ordinary skill in the art, the [prior art reference teachings] cannot be viewed in the abstract. Rather, they must be considered in the context of the teaching of the entire reference. Further, a rejection cannot be predicated on the mere identification in [the prior art reference teachings] of individual components of claimed limitations. Rather, particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed.

Consequently, the rejection of Claims 1 and 15 under 35 U.S.C. §103(a) as being unpatentable over Yoshihiko in view of Mulach is believed to be clearly improper and that this rejection should be reversed for the above-noted reasons.

3. HERSHBERGER CURES NO DEFICIENCIES IN YOSHIHIKO OR MULACH

Applicants note that Hershberger is concerned with a stator for a single-phase induction electric motor. It is in such a machine that Hershberger suggests that at least two different coil groups are disposed in the slots with these coils arranged symmetrically about an axis to form a corresponding number of magnetic poles. Note col. 2, lines 44-49 of Hershberger. Hershberger also teaches that the stator yoke section at each pole will include magnetic restriction means which is clearly disclosed to be the elongated slot that must extend transversely across the yoke section "in association with a preselected coil

accommodating slot spaced at a predetermined electric angle θ from each coil group axis in the rotational direction of the revolvable member." See col. 2, lines 50-55. The purpose is further disclosed to be to provide a high reluctance in the magnetic path of the quadrature axis flux to effect a phase shift in the flux components during starting conditions. See col. 2, lines 59-62 of Hershberger.

It is with consideration of this background that Hershberger suggests that slots 32 are to be provided so that the innermost portion 34 terminates adjacent to the center of a preselected slot. In addition, col. 5, lines 1-6 of Hershberger indicate that the enlargement of the end 34 is so that the very small magnetic bridge 37 that remains between each slot and each notch can be rapidly saturated while col. 5, lines 15-26 teach the filling of the notches with bonding material 38 to correct the weakness created by the slots that extend from the radial outside to almost the slots 17a themselves that leaves only the narrow magnetic bridge 37.

Accordingly, besides the fact that the attaining of desired rigidity characteristics for the core requires the bonding material 38 to be formed in the slots 32 after the laminations have been aligned, as disclosed at col. 5, lines 20-26 as noted above, it is clear that the slots must extend almost into engagement with the coil slots 17a and do not have any function of reducing the natural frequency of the laminated stator body and that the aim of slot ends has nothing to do with reduction of vibrations. Moreover, it would be clearly impossible to meet the design and operation goals of Hershberger without the provision of this bonding material 38 in each transverse notch 32 that extends almost into engagement with the winding slots 17a so as to leave at most a very narrow bridge portion 37 between the notches 32 and the slots 17a, all to improve starting performance as further noted at col. 5 lines 27-52 of Hershberger.

The embodiment of Figure 6 of Hershberger goes even further and requires the notches 32 to extend "entirely across the yoke section in direct communication with the preselected coil slot 17a" and the use of bonding material 38 is clearly still required for strengthening the weakened core. See col. 7, lines 25-29 of Hershberger.

Finally, the reasonable basis to modify the partial circular holes bolt holding holes of Mulach to include the dimensions of the unrelated slots of Hershberger or the adding of relief openings 34 of Hershberger is completely lacking. As noted in Ex parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Int. 1985):

Presuming *arguendo* that the references show the elements or concepts urged by the examiner, the examiner has presented no line of reasoning, and we know of none, as to why the artisan viewing only the collected teachings of the references would have found it obvious to selectively pick and choose various elements and/or concepts from the several references relied on to arrive at the claimed invention. In the instant application, the examiner has done little more than cite references to show that one or more elements, or subcombinations thereof, when each is viewed in a vacuum, is known. The claimed invention, however, is clearly directed to a combination of elements. That is to say, appellant does not claim that he has invented one or more new elements, but has presented claims to a new combination of elements. To support the conclusion that the claimed combination is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed combination or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.

This pronouncement by the board clearly parallels the requirements of In re Kotzab, discussed above as to the need to set forth convincing and logical reasoning why the artisan, with no knowledge of the claimed invention, would have selected the claimed elements for combination in the manner specified by the claims. As further noted above, In re Kotzab also requires that prior art disclosures must be interpreted in the context of the entire reference disclosure as to what is actually taught.

Here, the FR commits further error as to Claim 2 subject matter by attempting to take the teachings of Hershberger abstractly divorced from the underlying context of the full

teaching of Hershberger which is improper under Kotzab as well as In re Wasslau, 147 USPQ 391, 393 (CCPA 1965)("impermissible within the framework of section 103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art.").

Claim 7 depends on Claim 1 and requires that the notches have a width of between 0.5 mm and 1 mm. Claim 9, on the other hand, depends on Claim 2 and also requires that the notches have a width of between 0.5 mm and 1 mm. While Hershberger teaches a slot width of about between 0.01 inch to 0.030 inch for slots 32, these are magnetic restriction slots that extend all the way from an outer periphery of the stator to the top of winding slots 17 a and so are structurally and functionally dissimilar to either notches 12 of Yoshihiko or the partially circular bolt holes 44 of Mulach. The required reasoning as to why the artisan viewing only the collected teachings of the references would have found it obvious to selectively pick and choose the width of a slot 32 from Hershberger to modify the dissimilar slots of Yoshihiko in further view of the partially circular bolt holes of Mulach to arrive at the claimed invention is again missing.

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Consequently, the rejection of Claims 2, 7, and 9 under 35 U.S.C. §103(a) as being unpatentable over Yoshihiko in view of Mulach and further in view of Hershberger is also clearly contrary to established controlling precedent and must be reversed.

4. SACHER CURES NO DEFICIENCIES IN THE OTHER REFERENCES

The FR Action relies upon teachings found in Sacher and argues that these teachings would be applied to the notches 12 of Yoshihiko modified by the teachings of Mulach as to "typical partially circular holes 44 in which the building bolts will be disposed." The

outstanding Action, however, once again ignores that the notches 12 of Yoshihiko are for an entirely different purpose in an entirely different machine relative to the notches such as 13 of Sacher that are provided in the stator of a DC machine to mechanically decouple poles. Moreover, the outstanding Action also ignores the entirely different purpose in an entirely different machine relative to the “typical partially circular holes 44 in which the building bolts will be disposed” of Mulach and the notches 13 of Sacher that are provided in the stator of a DC machine to mechanically decouple poles. The above noted quotation from Ex parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Int. 1985) is again believed to be relevant as are the quotations from In re Kotzab and In re Wasslau as to the impermissibility of taking reference teachings totally out of context to recreate the claimed invention without concern as to evidence establishing proper motivation.

Consequently, the rejection of Claims 3-6 under 35 U.S.C. §103(a) as being unpatentable over Yoshihiko in view of Mulach and further in view of Sacher is also clearly improper under the controlling precedent and must also be reversed.

With regard to the rejection of Claims 8 and 14 under 35 U.S.C. §103(a) as being unpatentable over Yoshihiko in view of Mulach, Sacher, and Hershberger the arguments made above as to Claims 2 under 35 U.S.C. §103(a) as being unpatentable over Yoshihiko in view of Mulach, Sacher, and Hershberger are repeated as to Claims 8 and 14 that depend thereon. In addition, it is again noted that Sacher cures no deficiencies in the other references and that the FR fails to present any reasonable rationale complying with the above-noted precedent that establishes evidence of a suggestion, teaching, or motivation to combine the disparate teachings of the relied upon references. Consequently, this rejection applied to Claims 8 and 14 is also clearly improper under the controlling precedent and must also be reversed.

With regard to the rejection of Claims 10-13 under 35 U.S.C. §103(a) as being unpatentable over Yoshihiko in view of Mulach, Sacher, and Hershberger the arguments made above as to Claims 3-6 are repeated as to Claims 10-13 that depend thereon. In addition, it is again noted that Hershberger cures no deficiencies in the other references and that the FR fails to present any reasonable rationale complying with the above-noted precedent that establishes evidence of a suggestion, teaching, or motivation to combine the disparate teachings of the relied upon references. Consequently, this rejection applied to Claims 10-13 is also clearly improper under the controlling precedent and must also be reversed.

CONCLUSION

The rejections applied to Claims 1-15 should all be reversed as being clearly improper under the controlling precedent for the above-noted reasons.

Respectfully submitted,

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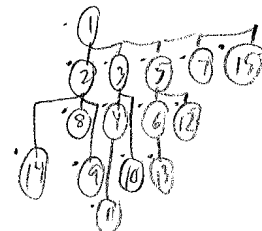


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APPENDIX

1. A laminated stator body for an electrical machine, which laminated stator body is composed of a multiplicity of segmental laminations, each segmental lamination being provided on a radial inside with slots for accommodating conductors of a stator winding, each slot extending from the radial inside to a root portion nearest to a radial outside of each segmental lamination, with the portion of each segmental lamination remaining between the root portion and the radial outside defining a yoke height, wherein each segmental lamination is provided on the radial outside with periodically distributed notches all of equal dimensions including a notch depth that is much less than yoke height, with the number and depth of the notches being selected to increase mechanical strength by reducing vibration amplitudes during machine operation, the notches and slots of actually adjacent segmental laminations in the laminated stator body being arranged in alignment with one another to form said laminated stator body, said notches being filled only with an atmosphere surrounding said laminated stator body.
2. The laminated stator body as claimed in Claim 1, wherein the notches end in a relief opening at their radially inner end.
3. The laminated stator body as claimed in Claim 1, wherein the number of notches is twice as great as the number of slots.
4. The laminated stator body as claimed in Claim 3, wherein the notch depth is on the order of magnitude of 20% of the yoke height.
5. The laminated stator body as claimed in Claim 1, wherein the number of notches is equal to the number of slots.
6. The laminated stator body as claimed in Claim 5, wherein the notch depth is on the order of magnitude of 40% of the yoke height.



7. The laminated stator body as claimed in Claim 1, wherein the notches have a width of between 0.5 mm and 1 mm.
8. The laminated stator body as claimed in Claim 2, wherein the number of notches is twice as great as the number of slots.
9. The laminated stator body as claimed in Claim 2, wherein the notches have a width of between 0.5 mm and 1 mm.
10. The laminated stator body as claimed in Claim 3, wherein the notches have a width of between 0.5 mm and 1 mm.
11. The laminated stator body as claimed in Claim 4, wherein the notches have a width of between 0.5 mm and 1 mm.
12. The laminated stator body as claimed in Claim 5, wherein the notches have a width of between 0.5 mm and 1 mm.
13. The laminated stator body as claimed in Claim 6, wherein the notches have a width of between 0.5 mm and 1 mm.
14. The laminated stator body as claimed in Claim 2, wherein the number of notches is equal to the number of slots.
15. The laminated stator body as claimed in Claim 1, wherein the atmosphere is air.